



# Department of Environmental Quality

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May 1, 2000

Mr. Pad Quinn
Port of Portland
PO Box 3529
Portland, Oregon 97208

Re:

Preliminary Assessments - Port of Portland

**Facilities** 

Dear Pad:

The Oregon Department of Environmental Quality has reviewed the four preliminary assessments submitted on March 14, 2000. Preliminary assessments were prepared for the following Port of Portland facilities:

- Terminal 1
- Terminal 2
- Terminal 4 Slip 1
- Terminal 4 Auto Storage Facility

The primary purpose of the preliminary assessments is to determine whether current or historic operations at the site may have resulted in a release of hazardous substances and whether that release may have contributed to sediment contamination in Portland Harbor. This information will be used to determine whether further investigation or cleanup activities are required

In general, the preliminary assessments lack the detail necessary for DEQ to determine whether further action is necessary. The preliminary assessments fail to provide sufficient information regarding the use, management, and potential for releases of hazardous substances. The Ownership and Operations History and Waste Characteristics sections should be revised to include this information as described below. Information on the use of hazardous substances should be used to identify potential source areas, migration pathways and contaminants of concern.

Based on the relatively low concentrations of sediment contamination detected adjacent to Terminal 1, Terminal 2 and the Auto Storage Facility, it does not appear likely that these sites have contributed to sediment contamination. However, information regarding the use of hazardous substances at the facility should be used to determine whether any additional investigative work is necessary to confirm there no current pathway from the site to the Willamette River.



At the Terminal 4, Slip 1 facility, sediment contamination above the baseline established for Portland Harbor have been detected. Contaminants detected above baseline concentrations include low and high molecular weight PAHs, lead and zinc. As a result, further investigation will likely be required to determine the extent to which operations at the Terminal 4, Slip 1 facility have contributed to sediment contamination within Portland Harbor. A summary of DEQ comments on the preliminary assessments is provided below:

# Comments Applicable to All Preliminary Assessments:

- The Waste Characteristics section of each preliminary assessment should thoroughly discuss hazardous substances that have been used at the site and describe all current and historic waste management practices. To the extent possible, types and quantities of hazardous substances used, and management and disposal practices should be described. All spills of hazardous substances should be identified and discussed. The discussion should also include a summary of the facilities regulatory history including the results of any state or federal inspections.
- The Site Description section should include a discussion of stormwater lines and discharge
  points at each facility. Site maps depicting catch basins, stormwater lines and outfalls should
  be provided for each facility.
- The Ownership and Operational History section requires additional detail regarding historic operations that may have resulted in the use or release of hazardous substances. In addition to on-shore operations, this section should include a discussion of in-water operations.
- All conclusions should be documented. Documentation may include historic aerial
  photographs and maps, analytical results from environmental investigations or monitoring
  required by water quality permits.
- The groundwater discussion should note that groundwater flow is generally towards the Willamette River. As a result, any evaluation of groundwater contamination should consider potential effects on aquatic receptors and utilize DEQ water quality standards for surface water (OAR 340-41-205).
- The discussion of the hydrological setting is general and may not be applicable to a given site. For example, at many locations within Portland Harbor, the Troutdale aquifer is not present. Typically, the geologic units present include fill, alluvium and basalt. Estimates of the thickness of each unit should be based on site specific information or nearby investigations when possible. In addition, it should be noted that the basalt aquifer has been used historically as an industrial water supply source.
- It should be noted that industrial uses of water may result in exposure to workers through dermal contact or inhalation of vapors released from the water.

- Information regarding any water quality or other state or federal permits should be provided (e.g., stormwater permits). The results of any monitoring required by state or federal permits should also be included.
- Fish and wildlife species listed as either threatened or endangered should be identified. In addition, it should be noted that winter seine catches suggest that salmonid rearing may occur in the lower Willamette.
- The preliminary assessments fail to recommend what steps are necessary to

# **Specific comments:**

# Terminal 1:

- The waste characteristics section should elaborate on the results of the 1991 Environmental Site Assessment (ESA). The report should discuss any conclusions regarding the use of hazardous substances used at the facility and the potential for releases. All sampling results should be discussed and a table that shows analytical results and sample depth should be included.
- Further documentation of the contaminated soil removal is required. This should include
  results of confirmation samples, how the soil was disposed of and an assessment of the
  potential for groundwater contamination. In addition, the potential for releases from the tank
  to impact the river should be assessed based on the results of the soil investigation and an
  evaluation of potential migration pathways.
- The report should note whether materials containing arsenic or beryllium (both detected above residential soil cleanup standards) were ever used at the Terminal 1 Facility.
- More discussion of the sediment investigation should be included. For example, a discussion of the compositing techniques, sample description and depth of sample collection should be provided. In addition, the report should clarify whether the dredging took place. The relatively low levels of contamination detected in sediments should be used to support the conclusion that hazardous substance releases at the site have not impacted Willamette River sediments.

# Terminal 2:

- The ownership and history section should discuss activities that took place at the former WISCO Shipyards and West Coast Terminal company.
- Further discussion and documentation of hazardous substance use and management in the
  vicinity of the gearlocker building should be provided. For example, the report states that
  used oil handling practices in the vicinity of the gear locker building were inadequate but no
  information on those practices is provided.

- Further discussion of the 1998 soil removal and investigation should be provided. For
  example, it is unclear whether the April 1998 GeoProbe explorations occurred prior to or
  following the contaminated soil removal. This discussion should also include an assessment
  of groundwater impacts.
- Documentation of groundwater use in the vicinity of Terminal 2 should be included. A well survey may be required if information regarding surrounding water use in not available.
- The report should clarify that the sediment samples collected in support of the proposed dredging operation were composites. The location of the sediment reference samples should be included. In addition, the report should clarify whether the dredging took place. The relatively low levels of contamination detected in sediments should be used to support the conclusion that hazardous substance releases at the site have not impacted Willamette River sediments.

# Terminal 4 - Slip 1:

PAHs and selected metals (e.g., lead and zinc) were detected at in sediments within slip 1 at
concentrations above the Portland Harbor baseline concentrations. In addition, DDT was
detected at concentrations exceeding the Dredged Material Evaluation Framework. The
preliminary assessment should discuss potential sources of these contaminants considering
current and historical operations at Terminal 4.

### Terminal 4 - Auto Storage Facility

- A more detailed summary of the tank work associated with the UST release and auto cleaning operations should be provided. In addition, given the presence of chlorinated solvents in groundwater at this location, a discussion of other potential sources of groundwater contamination should be included (e.g., the former auto wrecking yard). As agreed to during our April 24, 2000 meeting, releases associated with the tank area will be addressed through DEQ's tank program. However, further evaluation may be required to determine whether contaminants released from the tank area reached the Willamette River.
- Although the lower portion of the site appears to slope towards the Willamette River, the
  direction of surface run-off and groundwater flow at the upper portion is unclear. Maps
  showing the direction of groundwater flow and site topography A would be useful.
- Records from Toyota regarding the use of hazardous substances including any spills that may
  have occurred should be obtained and summarized in the preliminary assessment.
- The preliminary assessment indicates that Tier III biological testing was performed. However, the report does not present or discuss these results. A full presentation of the results of biological testing should be provided.

 The conclusions section states that the Auto Storage Facility is not expected to have contamination impacts to groundwater. This is contradicted by the tank release in the upper portion of the site.

Please revise the preliminary assessments to address the above comments and resubmitted them to DEQ within 30 days of receipt of this letter. In addition, the preliminary assessment for Terminal 5 should also be submitted.

DEQ is interested in working with the Port of Portland to resolve issues regarding the Port of Portland facilities described above. Consequently, it may be beneficial to schedule a meeting to discuss DEQ comments on the preliminary assessments. Please contact me at 229-5648 to schedule a meeting or if you have any questions regarding this matter.

Sincerely,

Eric Blischke Coordinator

Portland Harbor Study Area

Waste Management and Cleanup Division

Cc: Mike Rosen, NWR/DEQ